CLAIMS

What is claimed is:

1. A method of communicating speech using very low digital data bandwidth, comprising the steps of:

translating said speech into text at a source terminal;

communicating said text across a communication link to a destination terminal; and

translating said text into reproduced speech at said destination terminal.

2. The method of claim 1, further comprising the step of:

generating said reproduced speech using a default voice profile.

3. The method of claim 1, further comprising the step of:

providing said destination terminal with a voice profile of a speaker, wherein

said speaker's voice profile contains the information needed to generate said reproduced speech that substantially resembles the sound of said speaker's voice.

4. The method of claim 1, further comprising the steps of:

generating a speaker voice profile by training said source terminal to recognize words spoken by a speaker for reproduction of audible speech corresponding to words spoken by said speaker having audible qualities approximating that of the speaker.

5. The method of claim 3, further comprising the step of:

communicating said voice profile across said communication link from said source terminal to said destination terminal.

6. The method of claim 5, further comprising the step of:

generating said reproduced speech using said speaker's voice profile at said destination terminal.

7. The method of claim 1, further comprising the step of:

generating said reproduced speech using a speaker's voice profile at said destination terminal, wherein

said speaker's voice profile contains the information needed to generate said reproduced speech that substantially resembles the sound of said speaker's voice.

8. The method of claim 6, further comprising the steps of:

generating said reproduced speech using a default voice profile of said destination terminal, until said speaker's voice profile has been communicated across said communication link; and

generating said reproduced speech using said speaker's voice profile at said destination terminal, after said speaker's voice profile has been communicated across said communication link.

9. The method of claim 4, wherein:

a portion of said training is performed during a portion of the time said speaker is communicating speech across said communication link.

10. The method of claim 9, wherein:

said speaker's voice profile is periodically updated as said speaker uses said method, and said updated profile is periodically communicated to said destination terminal.

11. A method of communicating speech using very low digital data bandwidth, comprising the steps of:

generating text at a source terminal based upon the voice of a speaker at said source terminal;

communicating said generated text from said source terminal across a communication link to a destination terminal;

translating said text into reproduced speech at said destination terminal;

communicating a voice profile of said speaker from said source terminal across said communication link to said destination terminal; and

generating reproduced speech using said speaker's voice profile at said destination terminal, wherein

said speaker's voice profile contains the information needed to generate said reproduced speech from said transmitted text that substantially resembles the sound of said speaker's voice.

12. The method of claim 11, further comprising the steps of:

generating said reproduced speech using a default voice profile of said destination terminal, until said speaker's voice profile has been communicated across said communication link; and

generating said reproduced speech using said speaker's voice profile at said destination terminal, after said speaker's voice profile has been communicated across said communication link.

13. The method of claim 11, wherein:

said text and said speaker's voice profile are simultaneously communicated across said communication link.

14. A method of communicating speech using very low digital data bandwidth, comprising the steps of:

translating said speech into text;

communicating said text across a communication link for subsequent translation into reproduced speech at a destination terminal; and

communicating a voice profile of a speaker across said communication link, wherein

said text and said speaker's voice profile are simultaneously communicated across said communication link.

15. The method of claim 14, further comprising the step of:

training said source terminal to produce a voice profile of a speaker, wherein

said training comprises a speaker speaking a number of words, which can be pre-determined words, expected words, or unexpected but recognized words.

16. A method of communicating conversational speech across a bi-directional communication link using very low digital data bandwidth, comprising the steps of:

translating a first speaker's speech into first text at a first terminal;

communicating said first text across said communication link to a second terminal;

translating said first text into first reproduced speech at said second terminal;

translating a second speaker's speech into second text at said second terminal;

communicating said second text across said communication link to said first terminal; and

translating said second text into second reproduced speech at said first terminal.

17. The method of claim 16, further comprising the step of:

providing said first terminal with a first voice profile of said first speaker; and

providing said second terminal with a second voice profile of said second speaker;

communicating said first voice profile across said bi-directional communication link to said second terminal; and

communicating said second voice profile across said bi-directional communication link to said first terminal;

generating said first reproduced speech using said first speaker's voice profile at said second terminal;

generating said second reproduced speech using said second speaker's voice profile at said first terminal, wherein

said first speaker's voice profile contains the information needed to generate said first reproduced speech that substantially resembles the sound of said first speaker's voice, and

said second speaker's voice profile contains the information needed to generate said second reproduced speech that substantially resembles the sound of said second speaker's voice.

18. The method of claim 17, further comprising the steps of:

generating said first reproduced speech using a default voice profile of said second terminal, until said first speaker's voice profile has been communicated across said communication link;

generating said second reproduced speech using a default voice profile of said first terminal, until said second speaker's voice profile has been communicated across said communication link;

generating said first reproduced speech using said first speaker's voice profile at said second terminal, after said first speaker's voice profile has been communicated across said communication link; and

generating said second reproduced speech using said second speaker's voice profile at said first terminal, after said second speaker's voice profile has been communicated across said communication link.

19. The method of claim 18, wherein:

said first text and said first speaker's voice profile are simultaneously communicated across said communication link; and

said second text and second speaker's voice profile are simultaneously communicated across said communication link.

20. The method of claim 18, wherein:

said first speaker's voice profile is provided by first training at said first terminal; and

said second speaker's voice profile is provided by second training at said second terminal, and wherein

said first training comprises said first speaker speaking a number of words, which can be pre-determined words, expected words, or unexpected but recognized words, and

said second training comprises said second speaker speaking a number of words, which can be pre-determined words, expected words, or unexpected but recognized words.